**Training through NBN: Australia-The world. Presentation notes.**

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**1**. **Title**

**2.** **Team members** Welcome

**4.** **Successes** Let’s start with the positives

**5. Our aim** was to test the capacity of the NBN in a training environment. We wanted to connect students with their teacher and each other using voice and images. To do this we used 2 platforms. Moodle, a LMS which held the learning content for the unit we were delivering and Adobe Connect for the online meeting room. (our “virtual classroom” – the sessions are called “webinars”)

**6. Notes** We discovered this type of training works and works well. Students enjoy the human component in training. They like connecting with other students and with their teachers. They like to be able to use up to date current & interesting resources and to be active in their learning.

This project relied on solid partnerships. We were able to successfully form a good partnership with another TAFE 650 kilometres away and we believe we have had a positive impact on student learning. Communication was a major component of this partnership and a key element for us to be able to deliver quality training. We also connected with a local council who expanded our knowledge about other projects in the region.

The NBN high connectivity allowed us to test videos, webcams, audio and upload files to share pods in Adobe Connect. We were able to achieve positive outcomes using the NBN which would not have been possible if we were using ADSL.

**7. Develop capability**. For many teachers, online learning is new and some lack confidence in its use. By developing capability, teachers became more confident and aware of the training uses of e-technologies.

**8. Notes** Students and staff needed to join the Moodle community and learn how to navigate the LMS. We all developed skills to varying degrees in the use of Adobe Connect. Our team had never hosted a webinar session before and this was a new experience for us. We learned to troubleshoot issues along the way. The IT staff had their own challenges as they were working on an NBN project like this for the first time. They indicated to us they learned a lot about the systems in doing so.

**9.** **Venues and connectivity**. Finding suitable NBN enabled venues that were not booked out was a challenge. This is where negotiation and flexibility became important. We found that NBN projects stimulate interest in the community. We were lucky enough to locate two venues for the project.

**10. Testing of different locations** with high speed broadband was essential to get base line data.

**11. Notes**. We used council-run venues but needed 2 due to prior bookings from other organisations. One did work better than the other. We learned that being NBN enabled, doesn’t automatically means a steady, stable connection with fast speeds and unlimited bandwidth. NBN enabled venues differ from each other depending on the number of ports, the number of documents and programs being simultaneously uploaded and downloaded , whether access is private or public and so on.

**12.** **Power of NBN** This was the aim of the project after all.

**13. Speedtest images** There were noticeable differences between ADSL and NBN. On the left is ADSL. It is interesting to note that even though this is a slow download, it is still better than 85% of AU and grade A. The NBN speedtest on the right is 99% better than AU and a grade A+.

**14. Webcams** NBN allowed us to simultaneously use webcams. This had not been possible before with ADSL. With ADSL, the visuals would be lost or perform slowly and out of sync, and sometimes the connection would be lost completely.

**15 Video** The streaming of high quality video was a major step in our trials. We were pleased to see that there was little to no interference when using NBN and the quality was excellent.

**16.** **Whiteboard** NBN allowed us to create a positive environment and a sense of team and fun. This is a whiteboard on Adobe connect where students simultaneously drew images during their webinar. This was possible due to the high bandwidth. This was a simple, yet well received activity.

**17. Notes:** Overall, the NBN gave us the opportunity to be innovative and provide new learning experiences for the students. It encouraged students to participate on a variety of levels. Critics of online learning often cite the lack of personal contact as a reason not to be involved in it. Our trials showed students, even the quieter ones, were able to find some way to be active in their learning – some students like to speak, some preferred typing, there was drawing, watching, listening but all had a go!

**18. Pan out** We found students actively helped each other, engaged in the learning and there was a sense of camaraderie – trying something new together.

**19. Issues**. Of course there were some challenges.

**20. Introducing e-learning to students.** There were varying levels of comfort with technology**.** Some of the students from Armidale had not participated in this type of learning before so were not confident.

**21 Notes.** The students were unfamiliar with Moodle and Adobe Connect. However they were all very positive and willing to learn and experiment. There was one student who had studied IT and she was very helpful to the others. This emphasised to us the need to know your audience, their strengths and needs**. Teachers also had varying levels of comfort.** The teachers in Armidale were new to online learning of this type. The teacher in the Illawarra teaches online weekly with our Moodle and utilises text based chat rooms so although she was competent in Moodle, Adobe Connect was new to her**. Adobe connect required a different approach to learning.** Students took a long time to realise the onus was on them to read the content and interact with the MOODLE before each Adobe connect meeting room session. Most thought they would learn the content during the one hour online meeting. On reflection this could have been emphasised to the students more frequently from our end. Students understood this by the last trial and it would have been great to have another session to consolidate it.

**22. Software** Some of the Moodle resources required specific software to be installed on the computers in order for them to run. We had overlooked this and it is an area we would need to get right should we undertake another project (eg, flashplayer or shockwave).

**23. Notes** There were two platforms (MOODLE and Adobe connect) for students to navigate and understand. This was difficult for some students and teaching time was lost due to the need to revisit navigation issues. Students needed to learn a few new tricks like how to navigate between screens; adjust their audio settings, understand the protocols of adobe (ie raising hands to ask a question) and so on. For some students (CALD) this multi-tasking proved difficult. For others, it was no problem. For the project team, there was a lot of on the spot trouble shooting to be done. We learned very quickly to be one step ahead and anticipate any issues that might arise. We seemed to have ironed most issues out when the last trial was undertaken.

**24.Information technology.** This was an area we left to the experts….

**25. Notes** …and we really didn’t realise the issues that the TAFE firewall would raise. Luckily for us we had an IT team in Armidale who persisted with connection issues through the firewall and we ended up with three trials using NBN from both locations. Again this highlighted the absolute need for positive frequent communication between stakeholders so these issues did not impact unfavourably.

**26.** **Pan out** With this project there is an element of the unknown and this can result in excitement and enthusiasm if communication is clear and no one is left in the dark.

**27.Minimising risks.** We did our best to minimise risks to ensure the success of the project

**28. Trials**. These were an important part of the project.

**29. Notes.** We had a number of pre trials before the main trials started. On reflection, we would have liked more time with the teachers from Armidale before we delivered the training to the students. This would have resulted in the Armidale teachers feeling more confident and a greater understanding of the project. Speed tests were completed at each trial and got progressively better as NBN was connected. We tested the Moodle platform and had the LMS content edited by a teacher who had not taught the unit before to check for its intuitive design and consistency.

**30. Logistics**. The management of the project required negotiation with a number of stakeholders to build an implementation plan and execute the delivery.

**31. Notes**: Getting the stars to align was a huge effort! To summarise, there were 6 stakeholders involved, each of whom had specific expertise, three quarters of whom we hadn’t met personally and were 650 kms away! Most of the people involved had to lock in the same 1 ½ hours of availability for 5 consecutive weeks. This required everyone to be extremely flexible.

**32. Communication** was the key ingredient to the successful implementation of the training through NBN.

**33. Notes.** We tried to establish clear guidelines early. There was a great need for frequency of communication to encourage questions and establish rapport. With a project like this it is important to constantly imagine what it would be like to be IT or a student or the teacher delivering so all was clear. There was a considerable amount of negotiation and flexibility required from everyone involved. There was frequent contact through emails and messages and telephone. In hindsight, a video conference to start the project would have been a useful starting point.

**34. Pan out** We did manage to minimise the risks and achieved our project aims.

**35. Next time we would…..**

**36. Scrabble image** Do most things the same but make a few adjustments to the plan.

**37. Notes** Students needed to be more aware of the responsibilities they have to their own learning and the differences in learning in this style to classroom learning. We would also like teachers undergo further training in e facilitation. The very best classroom teacher may not be always be the best online facilitator. We would ensure hardware was available at the start. Webcams were not available initially on the computers at Armidale and we needed to purchase these mid trial. The audio also was an issue so we had to spend some time troubleshooting this. Next time we would have 4 (?) getting started workshops with just the teachers involved. This was feedback from the Armidale teachers. We underestimated their familiarity with the technology. We needed them to be feeling very comfortable so they could troubleshoot for the Armidale students and understand this style of learning more clearly before the students came on board. We felt that at times the teacher anxiety with the new technology was greater than the student anxiety

**38. Upgrade computers** NBN connectivity like all internet connections depends somewhat on the power of the computer being used.

39. Notes Sometimes there was frustration with the core processing speed of the computers. This has nothing to do with NBN but tarnishes the overall experience. Ensure computers have the necessary programs to facilitate the content on the Moodle. Requirements such as a PDF reader, flash and shockwave are necessary. Not all computers have these installed.

40. Expansion. We would love to expand the project time line. More time would be valuable to the project – there were so many things that we would have liked to monitor over a longer period especially as capability and confidence grew.

41. Notes. For our project greater lead in time for students and teachers to understand the Moodle and Adobe Connect platforms so they are comfortable with the navigation of each would be beneficial. We suggest starting with a video conference with all the stakeholders, then conducting 4 trials with teachers only, two start up sessions for students and then six delivery sessions including assessment.

This trial did not test student upload of assessments. We uploaded and streamed videos, PowerPoints and documents which was great for the testing of the power of NBN but assessment would be another method with which to test the NBN s capacity. We would try to see if assessment could be e Facilitated using the webcams and sharing the screens. We believe assessment of remote student competencies would be a real bonus of the NBN systems.

42. Pan out. Find venues early. NBN connected sites are sought after as there are currently few suitable training venues available. The venues need to be booked as soon as possible to ensure their availability. This necessitates the need to contact all stakeholders early so dates for the trials can be set. Document the project regularly but above all don’t try to do too much at once. We originally proposed 7 entire units! We found this an impossible task for a trial. We ended up delivering two competencies from one unit…a far cry from our original plan! We realised we only needed a small sample of competencies to demonstrate the potential of using an NBN connection.

**43. Spinning world.** This project achieved its aim of delivering training across the state of NSW using the high level connectivity of NBN. We believe it has further potential to connect students across the world with high quality training.

**44. Pan out. Thank you**. Questions??